

Title (en)

PROCESS FOR PACKAGING RADIOACTIVE WASTES IN THE FORM OF SYNTHETIC ROCK

Title (de)

VERFAHREN ZUR VERPACKUNG VON RADIOAKTIVEM MÜLL IN FORM EINES SYNTHETISCHEN GESTEINS

Title (fr)

PROCÉDÉ DE CONDITIONNEMENT DE DÉCHETS RADIOACTIFS SOUS FORME DE ROCHE SYNTHÉTIQUE

Publication

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Application

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Abstract (en)

[origin: WO2010112732A1] The present invention relates to a process for packaging radioactive wastes, in which the following successive steps are carried out: a/ radioactive wastes, the solids content of which comprises at least 90% of compounds chosen from CaCO₂, Fe₂O₃, SiO₂, Al₂O₃ and B₂O₃, are supplemented so as to achieve a target composition of said supplemented wastes after calcination, and b/ said supplemented radioactive wastes are melted and c/ said molten pool is poured into a container so as to obtain, after cooling, a product comprising a vitreous or vitreous-crystalline synthetic rock having said target composition, characterized in that said target composition corresponds to the following definition, in a CaO, SiO₂ and X₂O₃ ternary system, in which X₂O₃ is a trivalent oxide or a mixture of trivalent oxides chosen from Al₂O₃, Fe₂O₃ or B₂O₃, Pc and Ps being the weight percentages of CaO and SiO₂: - Pc is from 35 to 60%, and - Ps is from 10 to 45%.

IPC 8 full level

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